



3D Modeling Automation for Mechanical Engineers Working in CAD providing Mechanical and Electrical Schematics Reducing Design Time by as much as 90%



James Sullivan
Chief Executive Officer

CadActive Technologies, LLC
www.cadactive.com

Contact:
James Sullivan
720.770.0250
james.sullivan@cadactive.com

Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine

CEOCFO: Mr. Sullivan, what is the idea for CadActive Technologies?

Mr. Sullivan: CadActive is a 3D modeling automation company. We create software to accelerate designs for engineers, mostly mechanical engineers working in CAD. Our goal as a company is to develop applications that save engineers time.

CEOCFO: What do you understand about the process that perhaps others do not?

Mr. Sullivan: I used to work at a large aerospace company, in their Commercial Space Systems Design group. It was a big company with a lot of really complex CAD models. They actually gave me the task of making their process better, so that their engineers did not have to spend so much time. I spent probably two or three years doing that before leaving and starting CadActive. Therefore, I had the industry experience of, let us say, one of the biggest companies in the world and could make it work for them, so I figured I could probably make it work for others as well.

CEOCFO: According to your site, with your suite of CAD automation tools you can reduce engineer designing time by as much as ninety percent. What are you able to facilitate to get you to that point?

Mr. Sullivan: The example that I like to give is, let us say, you are in a building and you are looking around and you are going to be designing a new set of rooms, or you are building a restaurant and you want to lay out the lights in the restaurant. To oversimplify it, we make software so that when someone puts a light bulb in a CAD model, all of the wiring for that bulb would automatically calculate and wire itself from the electrical box to the light bulb. Or for instance, if you are a car manufacturer and you have got hundreds or thousands of wires running throughout your car, all of the connectors for each one of those wires will automatically assemble themselves in the CAD model, so that someone does not have to spend the time to assemble each connector one by one. It is the same thing with automated piping. We do a lot with piping. For example in oil and gas, all of the reducers and fittings and flanges and things like that. We make software so that when an engineer puts one of those flanges in the model it automatically knows that it is using the right size flange. The engineer does not use the wrong part by accident and then order the wrong part, then go to install the wrong part and find out later down the road that it does not work. Therefore, we try to do a lot of automated design up front, and then follow that with automated checking, to help the engineer save time and energy downstream as well. Many of the repetitive tasks that engineers may have to do that is really just grunt work, not necessarily real engineering design. If it is a repetitive task, we strive to eliminate it.

CEOCFO: Are engineers comfortable and trusting your software will get it right? How do you gain that trust?

Mr. Sullivan: That is a good question. I have seen both ends of the spectrum. The way that the engineering process typically works is that the engineer always has a chance to review that work afterwards. Therefore, there is always the